Remarks

Entry of the above-noted amendments, reconsideration of the application, and allowance of all claims pending are respectfully requested. By this amendment, claims 1, 3-5, 10, 11, 13, and 15 are amended, claims 7 and 17 are canceled, and claims 21 and 22 are added. These amendments to the claims constitute a bona fide attempt by applicants to advance prosecution of the application and obtain allowance of certain claims, and are in no way meant to acquiesce to the substance of the rejections. Support for the amendments can be found throughout the specification (e.g., page 4, lines 30-33; page 7, line 18 to page 8, line 4), figures (e.g., FIGS. 4-5), and claims and thus, no new matter has been added. Claims 1-6, 8-16, and 18-22 are pending.

Claim Objections

Claims 10 and 11 were objected to because of alleged informalities. Claims 10 and 11 have been amended to recite "further comprising the step of" rather than "further the step of," as graciously suggested in the Office Action.

Withdrawal of the objection to claims 10-11 is therefore respectfully requested.

Claim Rejections - 35 U.S.C. § 103

Claim 1 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Lewis ("The Transmogrifier-2: A Million Gate Rapid-Prototyping System"; IEEE Transactions on Very Large Scale Integration Systems; June 1998) in view of FLEX10K ("FLEX 10K Device Family"; web.archive.org/20000303160208/www.altera.com/html/products/f10k.html; March 2000). Claim 2 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Lewis and FLEX10K in view of Mitchell (U.S. Patent No. 6,230,119). Claim 3 is rejected under 35

U.S.C. § 103(a) as allegedly being unpatentable over Lewis and FLEX10K in view of Keenan et al. (U.S. Patent No. 4,903,199; "Keenan"). Claim 4 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Lewis, in view of Mitchell, further in view of Keenan. Claims 5 and 7-12 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Lewis, Keenan, and Mitchell, in view of common knowledge in the art. Claim 6 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Lewis and Keenan in view of Wray ("Using microprocessors and microcomputers: the Motorola family"; 1994) and further in view of common knowledge in the art. Claim 13 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Lewis in view of Keenan. Claims 14-15 and 17-20 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Lewis and Keenan in view of common knowledge in the art. Claim 16 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Lewis and Keenan, in view of Wray, further in view of common knowledge in the art. This rejection is respectfully, but most strenuously, traversed.

Applicants respectfully submit that the Office Action's citations to the applied references, with or without modification or combination, assuming, *arguendo*, that the modification or combination of the Office Action's citations to the applied references is proper, do not teach or suggest one or more elements of the claimed invention, as further discussed below.

For explanatory purposes, applicants discuss herein one or more differences between the Office Action's citations to the applied references and the claimed invention with reference to one or more parts of the applied references. This discussion, however, is in no way meant to acquiesce in any characterization that one or more parts of the Office Action's citations to the applied references correspond to the claimed invention.

Applicants respectfully submit that the Office Action's citations to the applied references do not teach or suggest one or more elements of the claimed invention. A careful reading of the Office Action's citations to the applied references fails to teach or suggest, for example, the programmable logic device that is arranged and constructed to adjust the variable clock speed during execution of the at least one processor operation, as recited in applicants' independent claim 1.

Lewis (page 188, Abstract, lines 12-14) discloses:

> Other features include a system-level programmable clock that allows single-cycle access to off-chip memory, and programmable clock waveforms with edge resolution of 10 ns.

Lewis discloses the programmable clock. The Office Action's citation to Lewis fails to disclose adjusting the programmable clock during execution of a processor operation. Simply missing from the Office Action's citation to Lewis is any mention of the programmable logic device that is arranged and constructed to adjust the variable clock speed during execution of the at least one processor operation, as recited in applicants' independent claim 1.

So, the Office Action's citation to Lewis fails to satisfy at least one of the limitations recited in applicants' independent claim 1.

The shortcomings of the Office Action's citation to Lewis relative to certain elements of the claimed invention have been discussed above. The Office Action proposes a combination of the citation to Lewis with a citation to FLEX10K. However, the Office Action's citation to FLEX10K does not overcome the deficiency of the Office Action's citation to Lewis. Applicants respectfully submit that the proposed combination of the Office Action's citation to Lewis with the Office Action's citation to FLEX10K fails to provide the required approach, assuming, *arguendo*, that the combination of the Office Action's citation to Lewis with the Office Action's citation to FLEX10K is proper.

FLEX10K (Table 1 FLEX 10K Highlights) discloses:

> ClockLock™ and ClockBoost™ circuitries enhance device performance and provide clock multiplication.

FLEX10K discloses clock multiplication. The Office Action's citation to FLEX10K fails to disclose clock multiplication during execution of a processor operation. Simply missing from the Office Action's citation to FLEX10K is any mention of the programmable logic device that is arranged and constructed to adjust the variable clock speed during execution of the at least one processor operation, as recited in applicants' independent claim 1.

So, the Office Action's citation to FLEX10K fails to satisfy at least one of the limitations recited in applicants' independent claim 1.

The shortcomings of the Office Action's citations to Lewis and FLEX10K relative to certain elements of the claimed invention have been discussed above. The Office Action proposes a combination of the citations to Lewis and FLEX10K with a citation to Mitchell. However, the Office Action's citation to Mitchell does not overcome the deficiency of the Office Action's citations to Lewis and FLEX10K. Applicants respectfully submit that the proposed combination of the Office Action's citations to Lewis and FLEX10K with the Office Action's citation to Mitchell fails to provide the required approach, assuming, *arguendo*, that the combination of the Office Action's citations to Lewis and FLEX10K with the Office Action's citation to Mitchell is proper.

Mitchell (column 5, line 63 to column 6, line 2) discloses:

> FIG. 8 illustrates the emulation control register, EMUCON, provided within a data processor including an embedded software controlled emulator. Workings from the left to right, the first three bits of the register form a control word which causes internal timers and clocks of the data processor to be disabled if the correct code, in this example 101, is written into these bits of this function register.

Mitchell discloses an internal clock. The Office Action's citation to Mitchell fails to disclose an internal clock with variable clock speed. Simply missing from the Office Action's citation to Mitchell is any mention of the programmable logic device that is arranged and constructed to adjust the variable clock speed during execution of the at least one processor operation, as recited in applicants' independent claim 1.

So, the Office Action's citation to Mitchell fails to satisfy at least one of the limitations recited in applicants' independent claim 1.

The shortcomings of the Office Action's citation to Lewis, FLEX10K, and Mitchell relative to certain elements of the claimed invention have been discussed above. The Office Action proposes a combination of the citations to Lewis, FLEX10K, and Mitchell with a citation to Keenan. However, the Office Action's citation to Keenan does not overcome the deficiency of the Office Action's citations to Lewis, FLEX10K, and Mitchell. Applicants respectfully submit that the proposed combination of the Office Action's citations to Lewis, FLEX10K, and Mitchell with the Office Action's citation to Keenan fails to provide the required approach, assuming, *arguendo*, that the combination of the Office Action's citations to Lewis, FLEX10K, and Mitchell with the Office Action's citation to Keenan is proper.

Keenan (column 2, lines 15-23) discloses:

> The tester utilized with the present invention uses an interpreted language called TPL (Test Program Language) for device test programs. TPL is a BASIC- like language developed for use in testing integrated circuits. Turbo code enhances the performance of TPL, allowing certain statements to execute faster in an interpreted environment than is possible in a compiled environment.

Keenan discloses the interpreted language for device test programs. The Office Action's citation to Keenan fails to disclose a variable clock speed during execution of the device test programs. Simply missing from the Office Action's citation to Keenan is any mention of the

programmable logic device that is arranged and constructed to adjust the variable clock speed during execution of the at least one processor operation, as recited in applicants' independent claim 1.

So, the Office Action's citation to Keenan fails to satisfy at least one of the limitations recited in applicants' independent claim 1.

The shortcomings of the Office Action's citations to Lewis, FLEX10K, Mitchell, and Keenan relative to certain elements of the claimed invention have been discussed above. The Office Action proposes a combination of the citations to Lewis, FLEX10K, Mitchell, and Keenan with a citation to Wray. However, the Office Action's citation to Wray does not overcome the deficiency of the Office Action's citations to Lewis, FLEX10K, Mitchell, and Keenan. Applicants respectfully submit that the proposed combination of the Office Action's citations to Lewis, FLEX10K, Mitchell, and Keenan with the Office Action's citation to Wray fails to provide the required approach, assuming, *arguendo*, that the combination of the Office Action's citations to Lewis, FLEX10K, Mitchell, and Keenan with the Office Action's citation to Wray is proper.

Wray (page 346, lines 2-5) discloses:

> The preceding chapters have covered the design of μC and MCU systems using the 6800 family of components. This chapter covers the development of testing procedures as they have evolved since μPs and μCs were introduced. Many methods necessary to perfect the design are discussed.

Wray discloses testing procedures for microprocessors. The Office Action's citation to Wray fails to disclose adjusting a variable clock speed during execution of a processor operation. Simply missing from the Office Action's citation to Wray is any mention of the programmable logic device that is arranged and constructed to adjust the variable clock speed during execution of the at least one processor operation, as recited in applicants' independent claim 1.

So, the Office Action's citation to Wray fails to satisfy at least one of the limitations recited in applicants' independent claim 1.

The Office Action's citations to Lewis, FLEX10K, Mitchell, Keenan, and Wray all fail to meet at least one of applicants' claimed features. For example, there is no teaching or suggestion in the Office Action's citations to Lewis, FLEX10K, Mitchell, Keenan, or Wray of the programmable logic device that is arranged and constructed to adjust the variable clock speed during execution of the at least one processor operation, as recited in applicants' independent claim 1.

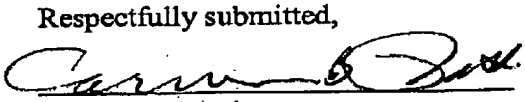
Furthermore, the Office Action does not allege that the art of record provides any teaching, suggestion, or incentive for modifying the citations to Lewis, FLEX10K, Mitchell, Keenan, and/or Wray to provide the claimed configuration.

For all the reasons presented above with reference to claim 1, claims 1, 4, and 13 are believed neither anticipated nor obvious over the art of record. The corresponding dependent claims are believed allowable for the same reasons as independent claims 1, 4, and 13, as well as for their own additional characterizations.

Withdrawal of the § 103 rejections is therefore respectfully requested.

In view of the above amendments and remarks, allowance of all claims pending is respectfully requested. If a telephone conference would be of assistance in advancing the prosecution of this application, the Examiner is invited to call applicants' attorney.

Respectfully submitted,



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